

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Robert J. Mathvink, et al.

Serial No.

10/520,839

Filed:

January 7, 2005

For: PIPERIDINO PYRIMIDINE DIPEPTIDYL PEPTIDASE

INHIBITORS FOR THE TREATMENT OF DIABETES

Art Unit: To Be Assigned

Examiner:

To Be Assigend

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT **UNDER 37 CFR 1.97**

Sir:

- 1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).
- 2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.
- 3. Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.
- Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK & CO., INC.

Computer generated form "IDS Letter" (IDS Folder), Merck & Co., Inc., 02/09/2005

INFORMATION DISCLOSURE STATEMENT

5. Pursuant to 37 C.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

	RELATED APPLICATION				
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE			
10/481,352	December 19, 2003	21249YP			
10/501,059	July 9, 2004	21247YP			

If th	his is inconvenient, additional copies will be submitted upon request.	
(6. In accordance with 37 C.F.R. 1.97, (check one)	
\checkmark	the attached information is filed within three months of the filing date	of the captioned case.
	the attached information is filed more than three months after the filir Office Action on the merits.	ng date but prior to the mailing of a first
	the attached information is being filed more than three months after of Office Action on the merits, but before the mailing date of a Final Act authorization is therefore given to charge Deposit Account No. 13-27	tion or Notice of Allowance. The enclosed
	1.17(p). the undersigned certifies that each item of information contained in the cited in any communication from a foreign patent office in a counterp months prior to the filing of this Statement.	
	the undersigned certifies that no item of information contained in this a communication from a foreign patent office in a counterpart foreign person signing the certification after making reasonable inquiry, was C.F.R. 1.56(c) more than three months prior to the filing of this State	n application, and, to the knowledge of the known to any individual designated under 37
•	F	Respect <u>fully</u> submitted,
		Chippe & Quette
	B	y: Philippe L. Durette
	<u>A</u>	ttorney For Applicant(s)
	F	Reg. No. <u>35,125</u>
		MERCK & CO., INC.
		Patent Dept., RY60-30
		P.O. Box 2000 Rahway, N.J. 07065-0907
		732)594- <u>4568</u>
	C	Pate: April 1, 2005

Substitute for form 1449A/PTO		Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
INFORMATION DISCLOSURE	Application Number	10/520,839
STATEMENT BY APPLICANT	Filing Date	January 7, 2005
> 1	First Named Inventor	Robert J. Mathvink, et al.
APR 0 4 2005 (use as necessary)	Group Art Unit	·
NŽ3/	Examiner Name	
Sheet TRADENTIAL I of 4	Attorney Docket Number	21139YP

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.	U.S. Patent Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	A	6,699,871 B2		Edmondson et al.	03/02/2004
	В	6,011,155		Villhauer	01/04/2000
	C	6,166,063		Villhauer	12/26/2000
	D	5,939,560		Jenkins et al.	08/17/1999
	E	6,303,661 B1		Demuth et al.	10/16/2001
	F	6,432,969 B1		Villhauer	08/13/2002
	G	4,386,090		Moinet et al	05/31/1983

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Examiner	aminer Cite		Foreign Patent Document		Name of Patentee or Applicant	Date of Publication of			
Initials*	No.	Office	Number	Kind Code (if known)	of Cited Document	Cited Document MM-DD-YYYY			
	A	PCT	WO 03/082817 A2		MERCK & CO., INC.	10/09/2003			
	В	PCT	WO 03/000180 A2		MERCK & CO., INC.	01/03/2003			
	С	PCT	WO 03/000181 A2		MERCK & CO., INC.	01/03/2003			
	D	PCT	WO 03/000181 A3		MERCK & CO., INC.	01/03/2003			
	E	PCT	WO 02/076450 A1		MERCK & CO., INC.	10/03/2002			
	F	PCT	WO 2004/007468 A1		MERCK & CO., INC.	01/22/2004			
	G	PCT	WO 2004/032836 A2		MERCK & CO., INC.	04/22/2004			
	Н	PCT	WO 2004/050022 A2		MERCK & CO., INC.	06/17/2004			
	I	PCT	WO 2004/058266 A1		MERCK & CO., INC.	07/15/2004			
	J_	PCT	WO 2004/064778 A2		MERCK & CO., INC.	08/05/2004			

Examiner Signature

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy

of this form with next communication to applicant.

	Substitute for form 1449A/PTO				Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE COMPLET
	INFORMATION	DIS	SURE	Application Number	10/530,839
6	TP ESTATEMENT BY	57 A 1D1	DI ICANT	Filing Date	January 7, 2005
1	- I	IAP	PLICANI	First Named Inventor	Robert J. Mathvink et al.
\	PR 0 4 2005 00		,	Group Art Unit	
1 Per	(use as misity shee	ts as ne	ecessary)	Examiner Name	
Sheet	TRAUC	of	4	Attorney Docket Number	21139YP

			U.S. PATE	NT DOCUMENTS	
Examiner Initials*	Cite No.	U.S. Patent Docume Number		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
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	FOREIGN PATENT DOCUMENTS									
Examiner	xaminer Cite		Foreign Patent Document		Name C Paragraph A	Date of Publication of				
Initials*	No.	Office	Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY				
	K	PCT	WO 2004/069162 A2		MERCK & CO., INC.	08/19/2004				
	L	PCT	WO 02/02560 A2		NOVO NORDISK A/S	01/10/2002				
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	P	PCT	WO 00/34241		NOVARTIS AG	06/15/2000				
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	S	PCT	WO 97/40832		Hansknoll-Institut Fur Naturstoff-Forschung E.V.	11/06/1997				
	Т	PCT	WO 03/000180 A3		MERCK & CO., INC.	01/03/2003				

Examiner Date				
Signature Considered	Examiner	-	Considered	

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					Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE		
	Substitute for form 1449	A/PTO		COMPLETI			
	INFORMAT	TION DIS	CLOSURE	Application Number	10/520,839		
	O STATEMEN	JT DV AD	DI ICANT	Filing Date	January 7, 2005		
	5 1	II DI AI	FLICANI	First Named Inventor	Robert J. Mathvink, et al.		
	APR 0 4 2005 00			Group Art Unit			
	(use as man	y sheets as n	ecessary)	Examiner Name			
ļ	Sheet 3	of	4	Attorney Docket Number	21139YP		

U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.	U.S. Patent Document	Kind Code known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY			
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			FOREIG	N PATENT	T DOCUMENTS	
Examiner Initials*	Cite No.	Office	Foreign Patent Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
	U	PCT	WO 02/02560	A3	NOVO NORDISK	01/10/2002
	v	PCT	WO 01/42262		AKZO NOBEL N.V.	06/14/2001
	w	PCT	WO 2004/043940		MERCK & CO., INC.	05/27/2004
	X	PCT	WO 2004/007468		MERCK & CO., INC.	01/22/2004
	Y	PCT	WO 2004/110436		MERCK & CO., INC.	12/23/2004
	Z	PCT	WO 2004/112701	A2	MERCK & CO., INC.	12/29/2004
	ZI	PCT	WO 2004/112701	A3	MERCK & CO., INC.	12/29/2004
	Z2	PCT	WO 2005/011581	A2	MERCK & CO., INC.	02/10/2005

Examiner Signature	· - · ·		Date Considered	i	

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•	Substitute for form 1449B/PTO	Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE COMPLETI KNOWN		
	INFORMATION DISCLOSURE	Application Number	10/530,839	
/	STATEMENT BY APPLICANT	Filing Date	January 7, 2005	
	~ 1	First Named Inventor	Robert J. Mathvink et al.	
	APR 0 4 2005	Group Art Unit		
1		Examiner Name		
	STRADE 4 of 4	Attorney Docket Number	21139YP	

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
	A	J. J. Holst, "Treatment of Type 2 Diabetes Mellitus with Agonists of the GLP-1 Receptor or DPP-IV Inhibitors", Expert Opin. Emerg. Drugs, Vol. 9(1) pp. 155-166, 2004.
	В	C. F. Deacon, et al., "Inhibitors of dipeptidyl peptidase IV: A Novel Approach for the Prevention and Treatment of Type 2 Diabetes?", Expert Opin. Investig. Drugs, Vol. 13(9) pp. 1091-1102, 2004.
	С	K. Augustyns et al., "Dipeptidyl Peptidase IV Inhibitors as New Therapeutic Agents for the Treatment of Type 2 Diabetes", Expert Opin. Ther. Patents, Vol. 13(4), pp. 499-510, 2003.
	D .	Novartis AG: WO0034241, "Novel N-substituted-2-Cyanopyrrolidines as Potent Inhibitors of Dipeptidyl Peptidase IV in the Treatment of Non-Insulin-Dependent Diabetes Mellitus", Exp. Opin. Ther. Patents, Vol. 10(12), pp. 1937-1942, 2000.
	Е	O. J. Orucker, "Therapeutic potential of dipeptidyl peptidase IV inhibitors for the treatment of type 2 diabetes", Exp. Opin Invest. Drugs, Vol.12, 2004, pages 87-100.
	F	T. P. Vahl & D. A. D'Alessio, "Gut peptides in the treatment of diabetes mellitus" Exp. Opin. Invest. Drugs, Vol. 13, 2004, pages 177-188.
	G	L. B. Knudsen, "Glucagon-like peptide-1: The Basis of a New Class of Treatment for Type 2 Diabetes", J. Med. Chem, Vol. 47, 2004, pages 4128-4134.
	Н	Ann E. Weber, "Dipeptidyl Peptidase IV Inhibitors for the Treatment of Diabetes", J. Med. Chem, Vol. 47, 2004, pages 4135-4141.
	I	J. J. Holst and C. F. Deacon, "Glucagon-like peptide 1 and inhibitors of dipeptidyl peptidase IV in the treatment of type 2 diabetes mellitus", Curr. Opin Pharmacology, Vol. 4, 2004, pages 589-596.
	J	C. F. Deacon, "Perspectives in Diabetes - Therapeutic Strategies Based on Glucagon-Like Peptide 1", Diabetes, Vol. 53, Sept. 2004, pages 2181-2189.
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